TS8450

PORTABLE

DESKTOP
SPECTROPHOTOMETER

Portable Desktop
Grating Spectrophotometer

TS8450 is a 45/0 optical portable desktop spectrophotometer, with 256 pixels dual array CMOS image sensor, imported white board, and gives consideration to the speed of measurement and the convenience of operation. It features with repeatability $\Delta E * ab$ easily control within 0.02, and inner instrument errors $\Delta E * ab$ control within 0.15. This accuracy measurement makes it good to use in the lab color accurate analysis and transfer. The TS8450 portable desktop spectrophotometer is also good to measure the brightness factor and color coordinates of traffic signs, markings and reflective films.Including GB 2893 and GB/T 18833 standard colors, it can customize the rectangular tolerance of polygons manually.

- Flat Grating
- 7-inch large touch screen
- 400-700nm spectrum display
- Color management software

SHENZHEN THREENH TECHNOLOGY CO., LTD.

TS8450 portable desktop spectrophotometer color measurement instrument is equipped with a single customized 18/8/4mm measurement diameter, used for accurate color measurement and quality control in plastic electronics, paint and ink, textile and garment printing and dyeing, printing, ceramics and other industries; It can be also used for fluorescence sample measurement. In addition, TS8450 portable desktop spectrophotometer is suitable for measuring the brightness factor and chromaticity coordinate of traffic road signs, marking lines and reflective film. It contains GB 2893 and GB/T 18833 standard colors and it can customize the rectangular tolerance of polygons manually.

Display screen

Handle

Test

Measuring Aperture

Removable bracket

Caliber switch

Power DC interface

USB interface

Foot switch interface

switch

Rotating Bracket

Optional Accessory

Micro Printer

Foot Switch

Horizontal or vertical measurement

Full spectrum LED light source and UV light source

Color management software

PRODUCT ADVANTAGES

1.Adopt combination full spectrum LED light source and UV light source

Full band balanced LED light source ensures sufficient spectral distribution in visible light range, avoids the spectral loss of white LED in specific band, ensures the accuracy of instrument measurement speed and measurement results, and professional UV light source ensures more reliable UV testing.

2.A variety of color space, a variety of observation light sources

Ts8450 portable desktop spectrophotometer color measurement instrument provides CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,βxy,Munsell(C/2) color space, and D65,A,C,D50,F2(CWF),F7(DLF),F10(TPL5),F11(TL84),F12(TL83/U30) light sources, which can meet the special measurement requirements under different measurement conditions.

3.Calirbation Certificate

Each TS8450 spectrophotometer has been verified and tested. After leaving the factory, each instrument is verified according to the measurement standards of authoritative verification departments, and the measurement data are traceable to the National Metrotechnical Institute to ensure the authority of the instrument test data.

4.Industrial-grade HD touch screen, easy to use user interface

Using 7-inch industrial grade hd touch screen, smooth operation, the user interface is easy to use and it makes the operation to become comfortable and convenient.
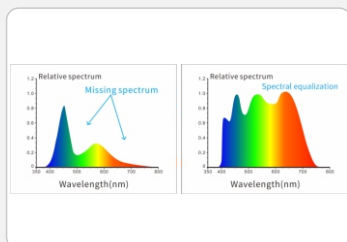
5.Color management software

SQCX quality management software with TS8450 spectrophotometer is suitable for quality monitoring and color data management in various industries. Data the user's color management, compare color differences, generate test reports, provide multiple color space measurement data, and customize the customer's color management.

6.Optional Accessory

Micro printer, foot switch, rotating bracket can be freely selected according to the needs.

TS8450 Portable desktop spectrophotometer

Model： TS8450

Optical Geometry： 45/0(45 ring-shaped illumination, 0 degree viewing angle)，Comply to CIE No.15，GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7

Characteristic：Enhanced version spectrophotometer, Customized single aperture Φ18/8/4 mm diameter aperture，used in laboratory accurate analysis and transmission;Used for accurate color measurement and quality control in plastic electronics, paint and ink, textile and garment printing and dyeing, printing, ceramics and other industries; It can be used for fluorescence sample measurement.

It is used to measure the brightness factor and color coordinates of traffic signs, markings and reflective films. It contains GB 2893 and GB/T 18833 standard colors. It can customize the rectangular tolerance of polygons manually.

Integrating Sphere Size： Φ40mm

Light Source： Combined full spectrum LED light source, UV light source

Spectrophotometric Mode： Flat Grating

Sensors： 256 Image Element Double Array CMOS Image Sensor

Wavelength Range： 400~700nm

Wavelength Interval： 10nm

Semiband Width： 10nm

Measured Reflectance Range： 0~200%

Measuring Aperture： Customized single aperture,LAV:Φ18mm/Φ20mm;MAV:Φ8mm/Φ10mm;SAV:Φ4mm/Φ5mm

Specular Component： 45/0

Color Space： CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,HunterLab,βxy,DIN Lab99 Munsell(C/2)

Color Difference Formula： ΔE*ab,ΔE*uv,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, DINΔE99,ΔE(Hunter)

Other Colorimetric Index： WI(ASTM E313,CIE/ISO,AATCC,Hunter)，YI(ASTM D1925,ASTM 313),Metamerism Index MI,Staining Fastness, Color Fastness, Color Strength, Opacity，8° Glossiness,555 tone classification

Observer Angle： 2°/10°

Illuminant： D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84),F12(TL83/U30)

Displayed Data： Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Simulation, Color Offset

Measuring Time： About 1.8s

Repeatability： Chromaticity value: MAV/SCI, within ΔE*ab 0.02 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

Inter-instrument Error： MAV/SCI, Within ΔE*ab 0.15(Average for 12 BCRA Series II color tiles)

Measurement Mode： Single Measurement, Average Measurement(2-99times)

Dimension： L*W*H=370X240X260mm

Weight： About 7.8kg

Battery： AC 24V, 3A Power adapter power supply

Illuminant Life Span： 5 years, more than 3 million times measurements

Display： 7-inch TFT color LCD, Capacitive Touch ScreenData Port：USB, Bluetooth ®5.0, trigger switch interface

Data Storage： Standard 1000 Pcs, Sample 30000 Pcs

Language： Simplified Chinese, English, Traditional Chinese

Operating Environment： 0~40℃, 0~85%RH (no condensing), Altitude < 2000m

Storage Environment： -20~50℃, 0~85%RH (no condensing)

Standard Accessory： Power Adapter, USB Cable, User Guide, PC Software(Download from office website), White and Black Calibration Cavity, Protective Cover, Aperture (Optional Aperture)

Optional Accessory： Micro Printer, Foot Switch, Rotating Bracket

Notes： Technical parameters are only for reference, subject to the actual sale of the product